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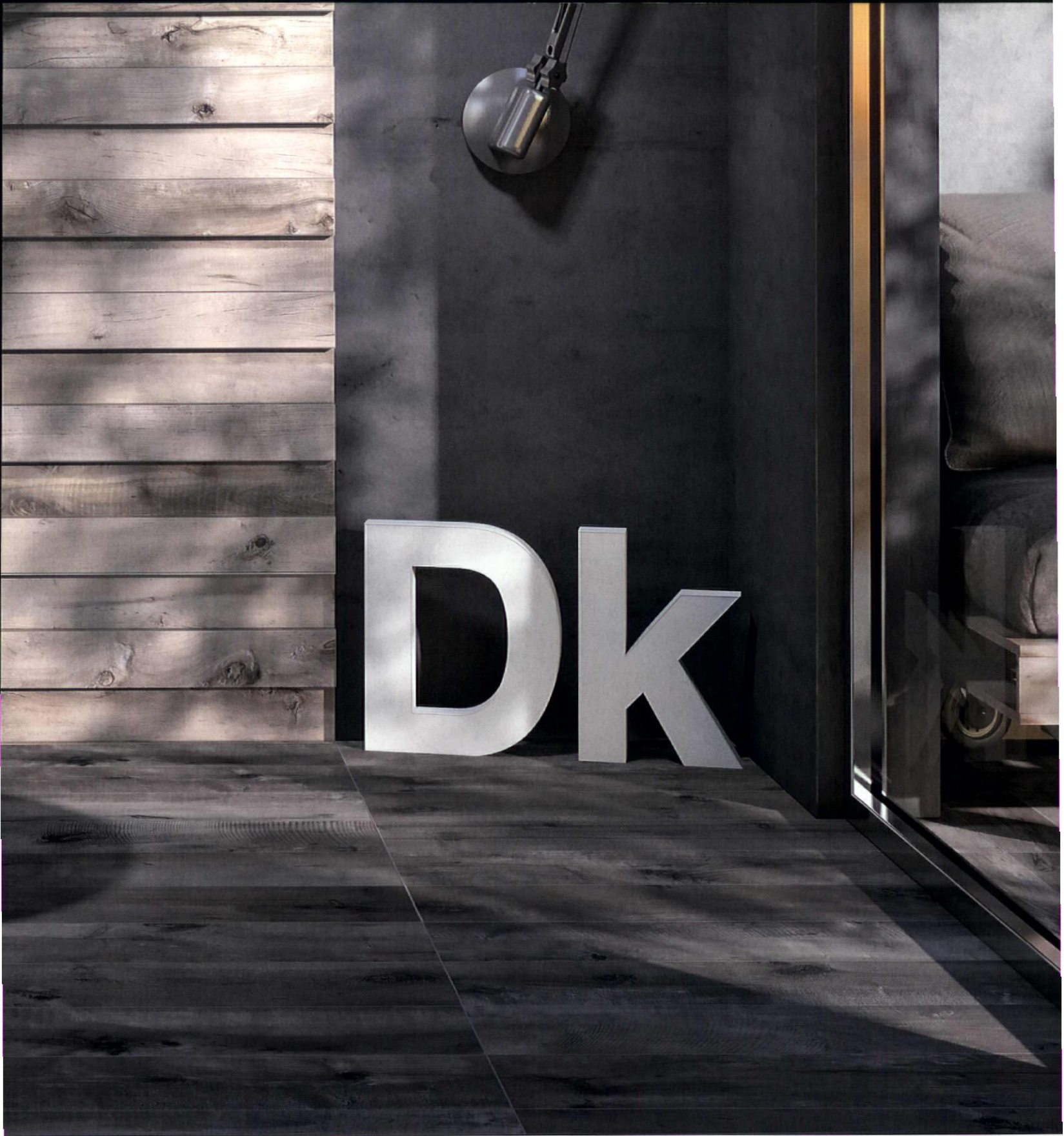


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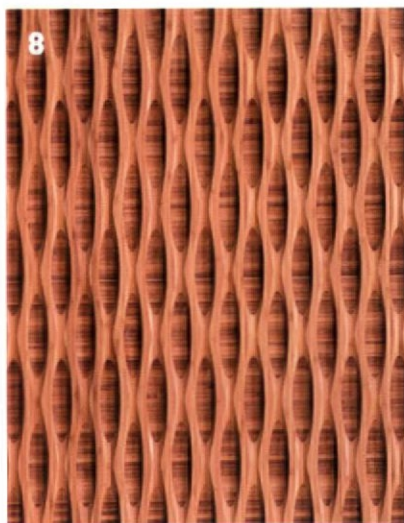
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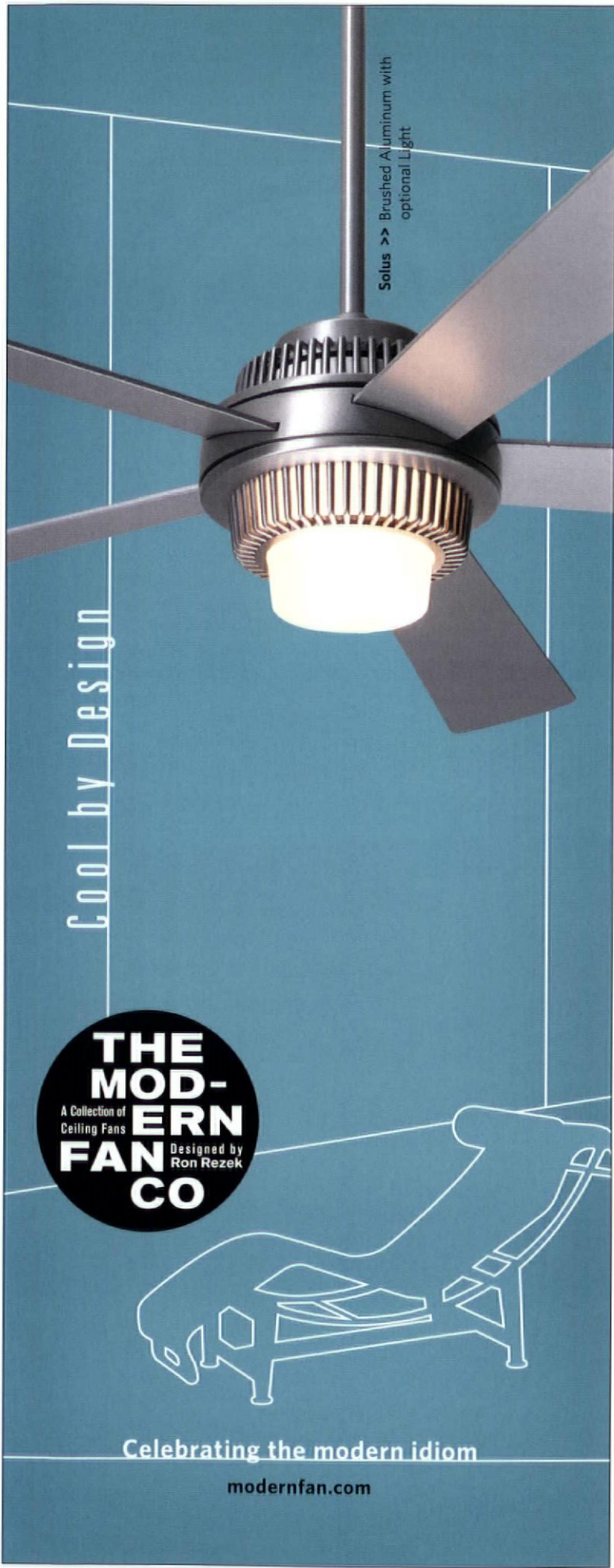
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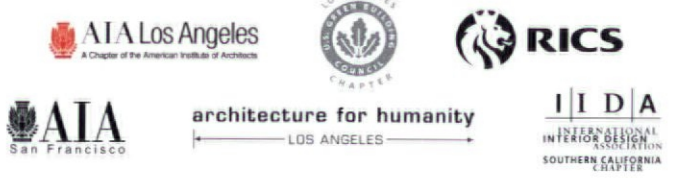
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EDITOR'S NOTE

Irreversible? That's one word no one likes to hear—especially when it comes to our climate. I hope we'll start taking responsibility for our actions and change the course we're heading on but, until then, what does one do? Batten down the hatches and prepare for the next super storm?

Yes, that's exactly what we must do. As the weather becomes more unpredictable—hundreds of tornadoes surging through the country, powerful hurricanes and storms—we need to not only learn from the past but imagine the future in order to save lives. Our feature *Learning from Katrina* (p.28) reexamines lessons learned and probes what else can be done in times of crisis. Imagining the future can be challenging, but technology can help us. Editor Lisa

Bingham-Dewart canvassed the design community to report on *15 Products that Can Save Lives* (p.23). We also talked to Jack Hébert of the Cold Climate Housing Research Center (p.12) on how research, taking place in Alaska, might help other states address their own inefficiencies. As Hébert notes, Alaska is the canary in the coalmine of climate change with an acute environmental impact. His advice: "We have to look for creative solutions that will address the problem and not add to it."



Eric Roth

A handwritten signature in dark ink that reads "Alexi Drosu". The signature is fluid and cursive, with a long horizontal stroke at the end.

Alexi Drosu
Editor in Chief



origins collection | tonal textures | vintage color palette | recycled yarn content | interiors and exteriors

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SHOWROOM

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SITSKIE

Designer Adam Friedman crafts handmade, sustainable pieces at his Los Angeles-based studio. Using a patent-pending seating system inspired by pin-impression toys, Friedman's series of benches and chairs, made of interlocking wooden blocks, molds to the individual's body. Prices start at \$3,600. Sitskie.com

PLYBOO

The new Reveal Collection introduces an array of sophisticated paneling (\$25-\$28 per sq/ft) that contributes three LEED credits, contains no VOCs and is made of 100 percent FSC certified bamboo. PlybooSound's acoustical panels are designed with the company's proprietary QuietWall technology to reduce ambient noise. Plyboo.com

WEWOOD

This Portuguese company strives to reinvent classic furnishings. Case in point, the new series of sideboards that pairs solid oak with unusual finishes, such as the hand-painted glazed tiles on the *Manuel* or the lacquered strips of vibrant color on *Colour of Me*. Wewood.eu



CERNO

The Silvia Giant floor lamp's scale creates a strong impression without overpowering a room, and the energy-efficient, LED light, that is fully dimmable without flickering, is made of walnut and aluminum. Based in Southern California, Cerno aims to fuse quality, performance and resource efficiency with modern design. Price upon request. Cernogroup.com





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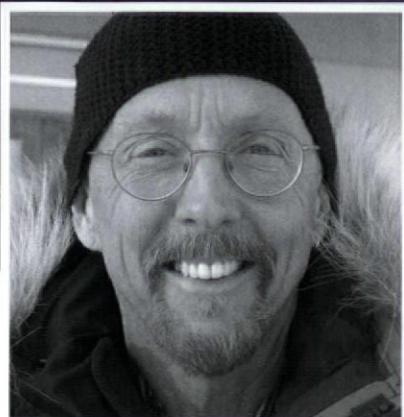


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Jack Hébert

President/CEO, Cold Climate Housing Research Center

Alaska's climate, geography and diverse population present a unique set of housing challenges. Since its founding in 1999, the Cold Climate Housing Research Center, under the direction of the organization's president and CEO, Jack Hébert, focuses on developing and implementing building techniques and methods that promote safe, affordable, durable and energy efficient homes for cold climates. "If we find a solution that works well, we're brilliant," he says with a laugh. "If it doesn't work quite so well, we call it science." Hébert, a homebuilder for three decades, and his team work from a base in Fairbanks in the state's first LEED Platinum-certified building. There, they conduct research on housing and building performance, test products and building techniques, drawing on both cutting edge technologies and indigenous practices to guide their direction. In turn, the work they do has implications far beyond Alaska. "Home building is my passion; the research center is my obsession," says Hébert.

How did you come to CCHRC?

I sort of created it with friends and collaborators and other people with like minds. When I was president of the Alaska State Homebuilding Association, I said we needed to develop ways of building that were more appropriate to our clients. People looked around and asked who would do it—I said that would be me.

What helps guide your research?

Our roots are in the building industry, so we felt we needed to involve those people throughout the state to identify the challenges they see. We set up set up Research Advisory Committees (RACs) that are located in the major climatic and geographic regions of our state. In Alaska, we have wet maritime climates where we get 170 inches or better rain every year, which is very different from the extreme north. We also have great cultural and lifestyle differences. The RACs help advise us and guide us to research that is appropriate for those areas.

What's your approach to your research?

Building science is evolving. What we learn today forms the foundation for what we learn in the future. As we build at the UAF Sustainable Village year after year, we move the quality and understanding forward. It's what mankind has always done and it's what we do in the housing industry.

Do you collaborate with other organizations? If so, how?

We start with our collaborator, the Alaska Housing Finance Corporation. They provide financial support for our work. At the same time, they work with us in partnership to address the needs they have. We just finished a housing needs assessment, where we looked at the state of housing throughout our territories. That includes issues of affordability, overcrowding and efficiency. We also work with federal agencies including HUD and the Office of Indian Housing and we work with agencies that are more regional or local. We learn the most when we work together.

What are some of your recent discoveries?

On our building science research side, we're doing work with ground source heat pumps—taking heat from the ground to heat a structure. You would think it doesn't make sense to go into 33 degree ground and be able to heat a building, but we found you can go down to 29 degrees and get usable heat. We're finding we get better than three times the amount of heat than the BTUs it takes to run the heat pump.

What are the implications for your research beyond Alaska?

We're being invited to travel quite a bit [as] our work gets known to a broader audience. I've spoken in Scandinavia, Siberia, Canada. Last fall

I was invited to Mexico. I thought it was a joke, but it was a conference relating to housing for indigenous people. Even in a tropical place our work is being looked at.

How is responding to climate change shaping your mission?

Alaska is the canary in the coalmine of climate change. The environmental changes are really acute up here—from beach erosion to species being lost, there's a lot of environmental stress. The real key is adaption and how do we do it quickly. We have to look for creative solutions that will address the problem and not add to it. If you're heating a building, make sure your heat use is minimized and look for ways to use it in the most benign way.



— Lisa Bingham-Dewart

San Francisco Living: Home Tours

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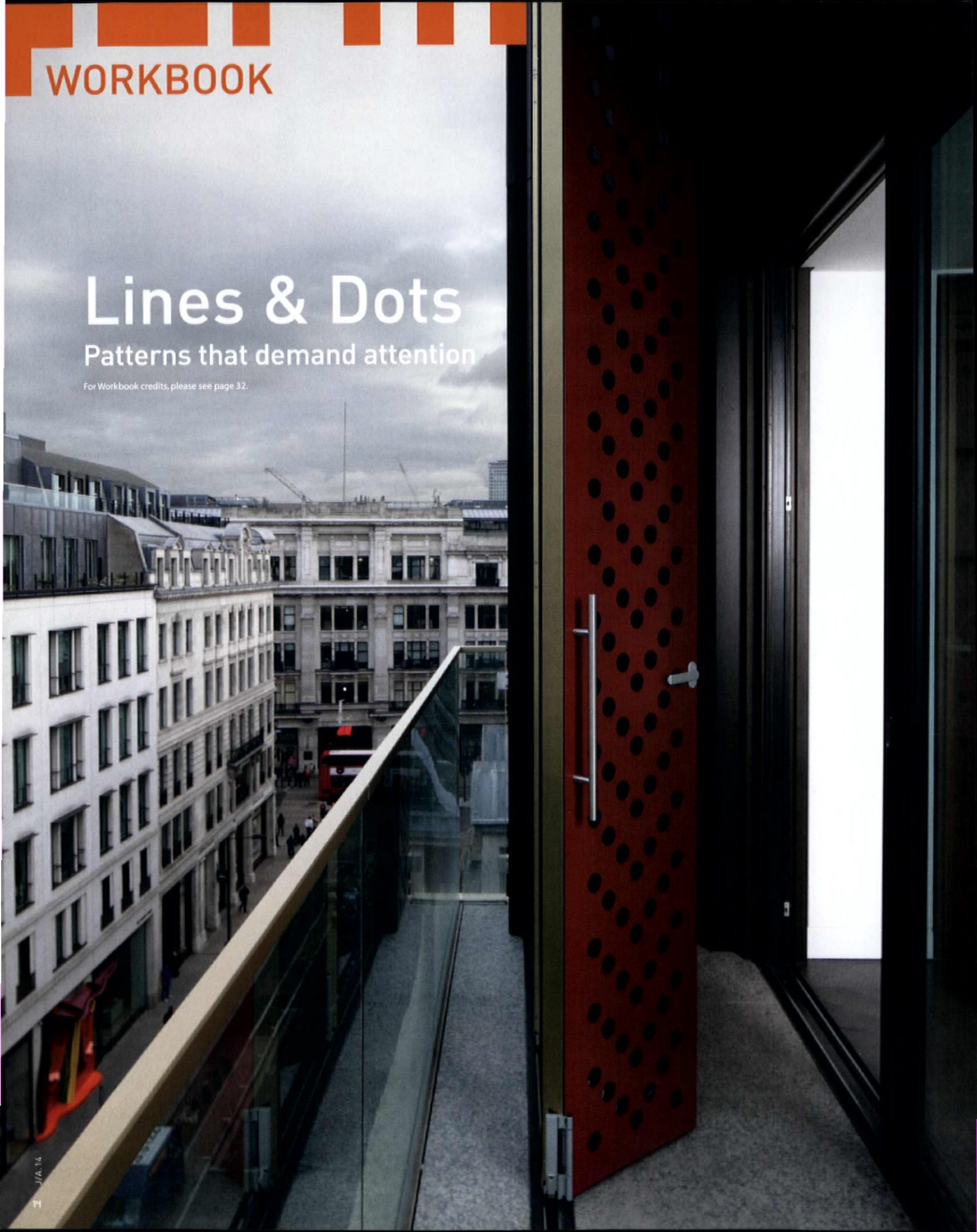


Top, L to R: Studio VARA © Bruce Damonte, Azevedo Design © Cesar Rubio, george bradley | architecture + design © Sharon Risédorph, Bottom, L to R: Leddy Maytum Stacy Architects © Tim Griffith, Zack | de Vito Architecture and Construction © Paul Dyer, Malcolm Davis Architecture © Paul Dyer

Lines & Dots

Patterns that demand attention

For Workbook credits, please see page 32.





10 Hanover Street

London, UK

Designer: Squire and Partners

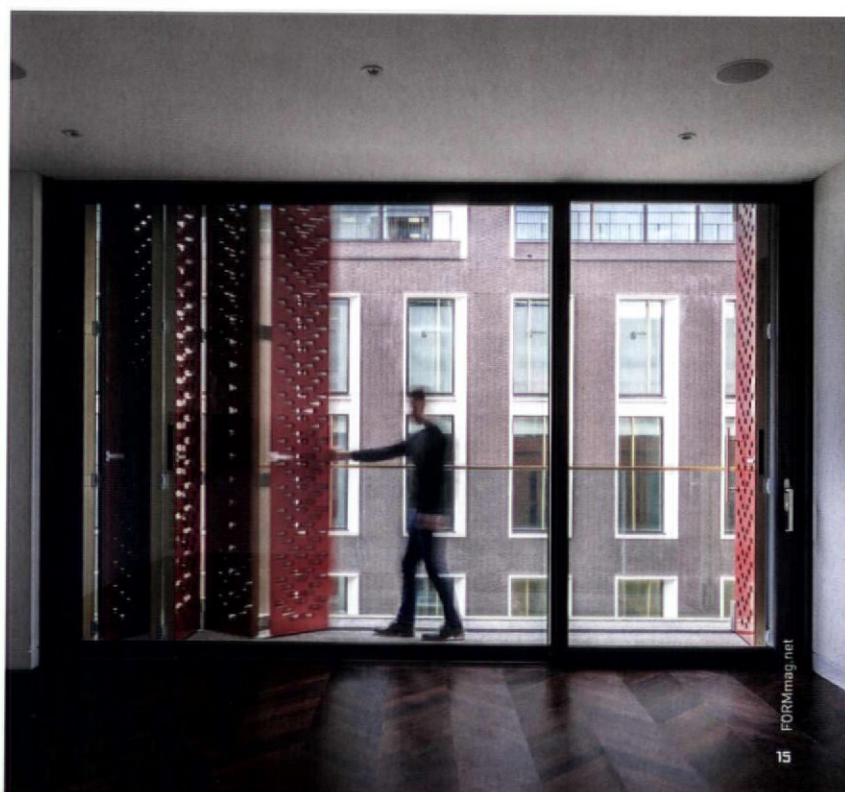
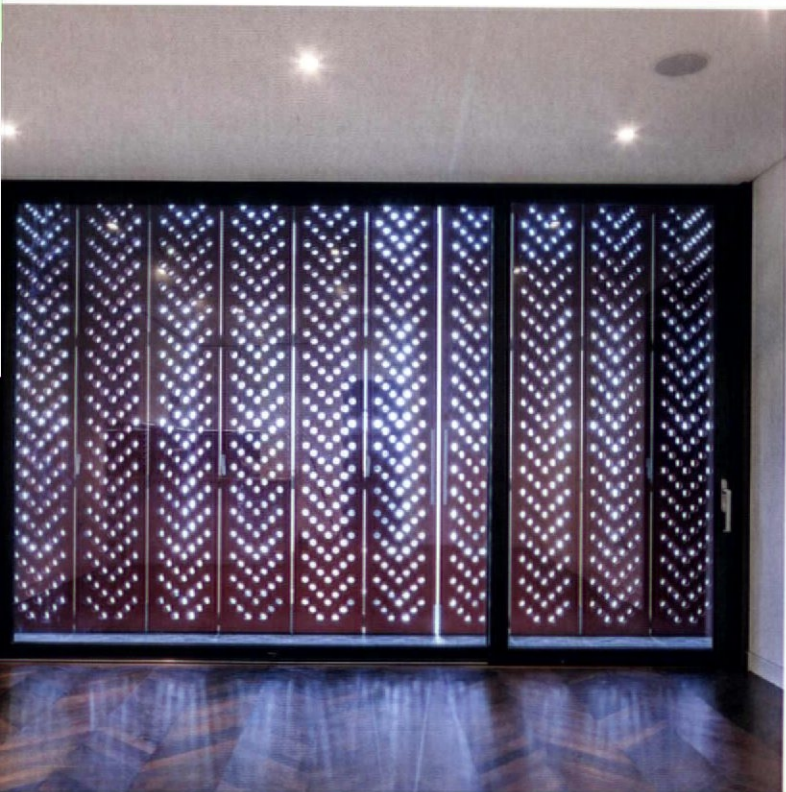
Website: www.squireandpartners.com

This slender, mixed-used building tucked in Hanover Street uses patterns to create a contemporary design that alludes to the neighborhood's historical roots. The practice's approach to design assumes that every site has its own history, character and needs. In this case, the design team wanted to create a dynamic frontage to the street. They chose to create a contemporary reference to traditional timber shutters that spans the width of the building with an innovative, bespoke pattern.

"From 1800 to 1930 Hanover Street was the home of military tailoring, which influenced the design and craft in the detail of the building," says partner Tim Gledstone. "A repeating chevron motif used to perforate the facade is abstracted from military tailoring techniques and forms of embroidery, combined with traditional military colors of bronze and crimson red." The perforated shutters also allow for light modulation and privacy.

The designers optimized the depth of the site location by providing generous open-plan living spaces, bedrooms to the rear addressing the lightwell, and wide balconies with views of Hanover Square and Regents Street. The top levels of the building feature both duplex and single apartments, while office space and the Hus Gallery of contemporary art reside on the lower levels.

Photography by Gareth Garder and James Balston.



Bénéteau Headquarters

Givrand, France

Designer: PAD Architectes

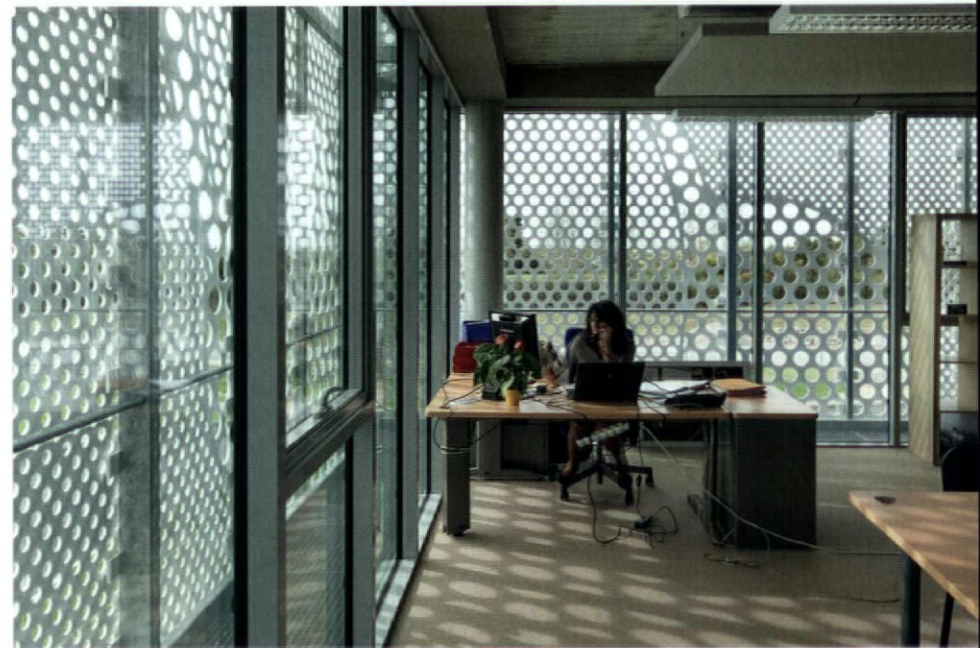
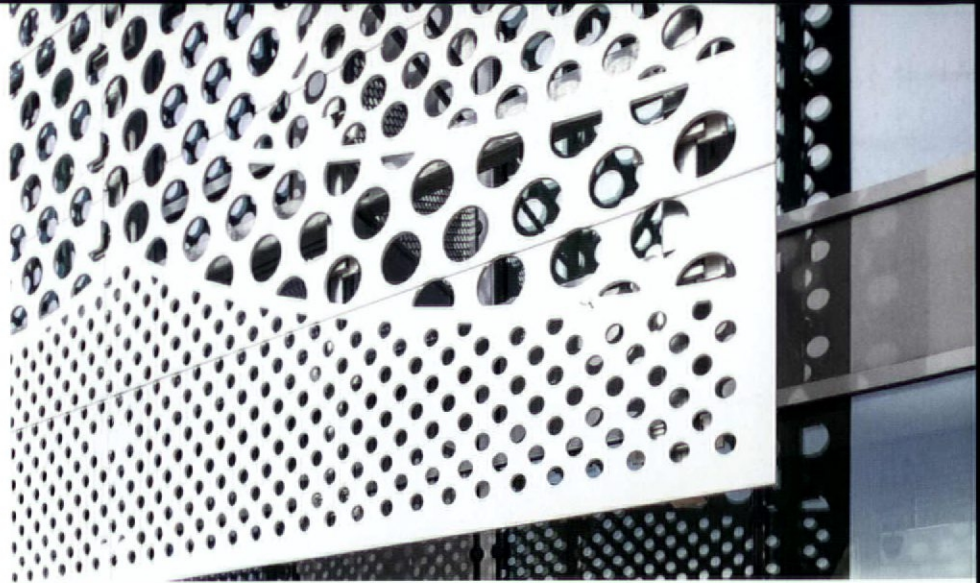
Website: www.padarchitectes.com

When developing the design for this leading yacht manufacturer, the architect kept several key issues in mind: create a façade that would stand out along the road, filter the view, reduce heat transfer, and provide adequate natural light inside. "We looked for a style that could meet all of those requirements and selected a curtain wall covered by a double skin filter," says Frédéric Periot of PAD Architectes. They turned to HI-MACS® new generation acrylic stone, a thermoformable, ultra-resistant, non-porous product, to create a perforated, mesh-like screen.

"The façade's design is actually an adaptation of the Bénéteau logo, which we enlarged and pivoted, then spread across its length," says Periot. "We zoomed in [so] that the pattern is no longer figurative, while still leaving enough of it to be able to recognize the logo. The design is also somewhat reminiscent of the wind and the waves, which ties in well with Bénéteau's identity."

The practice worked with Bénéteau's fluids engineering offices to align the perforation ratio with the building's heat and cooling requirements. "The 40 percent cover provided by the material has allowed us to significantly reduce our mechanical cooling needs," he adds. The mesh was installed one meter from the glass façade, allowing those inside to see through it while maintaining a comfortable level of natural light.

Photography by Mathieu Ducros.





Janus House

San Francisco, CA

Designer: Kennerly Architecture & Planning

Website: www.kennerlyarchitecture.com

As the name implies, this 4,200-square-foot house, located in the Lower Haight neighborhood of San Francisco, boasts two faces—one that embraces the historical Victorian façade and a second more modern profile. The design team preserved three main areas of the home: the northern façade, the gabled massing, and the proportion and arrangement of the front interior rooms. “We preserved [the façade], replacing the windows in kind including the leaded glass, and painted it a deep monochromatic palette with silver accents that enhances the sense of its textures and conveys a contemporary edge,” says principal Owen Kennerly.

The opposite side of the house expresses a more contemporary façade. The architect chose a flattering vertical, linear design that wouldn’t appear heavy handed. “We varied the spacing and divided the facade into four horizontal courses—corresponding with window heads and sills—that cut the verticals so the pattern can syncopate,” he says.

Inside the home, the designer preserved the handsome scale and proportion of the front rooms “but we dissolved this fabric a bit, by making doors wider and taller, to allow better circulation and visual flow” says Kennerly. Upstairs, they “excavated” the attic space to create gabled bedrooms for the family.

Photos by Bruce Damonte.



Lomocube

Lugano, Switzerland

Designer: Motta Papiani Architetti

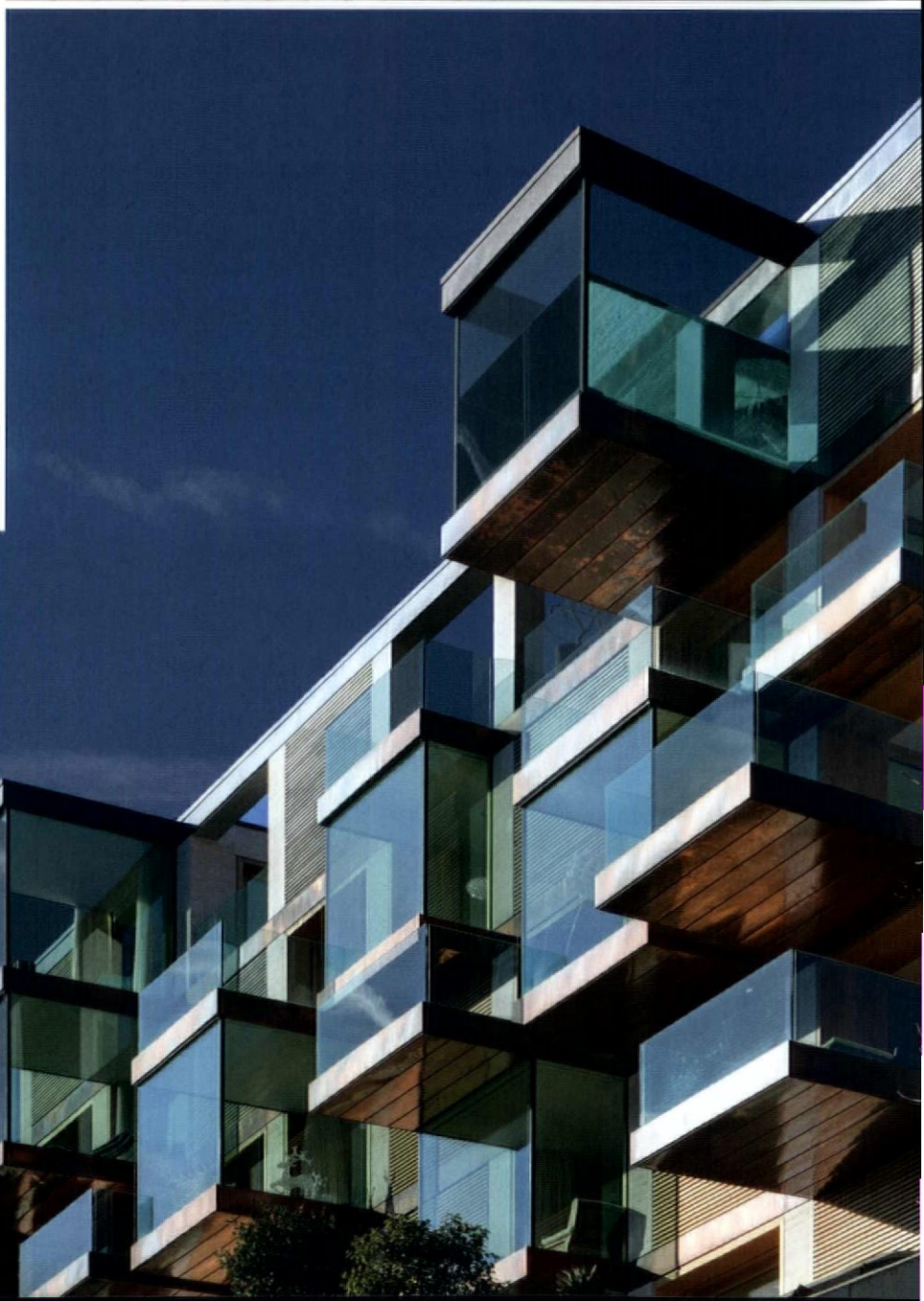
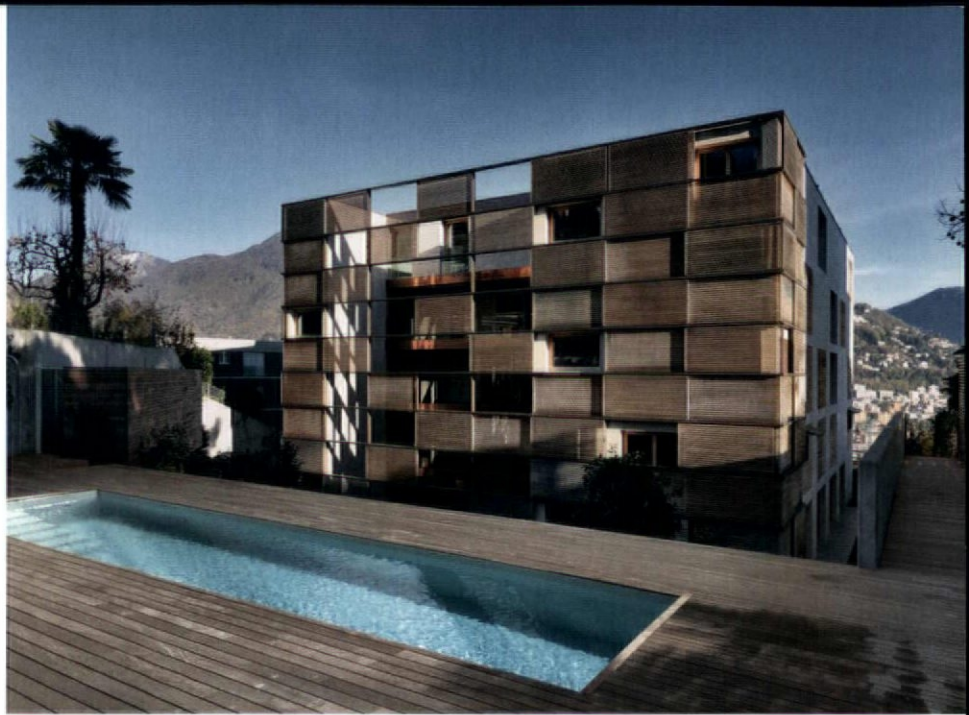
Website: www.mpaarchitetti.com

This high-profile condominium development is set on the lakeshores of Lugano, and so the architects wanted to maximize the views and emphasize a connection between the building and the surrounding landscape. They devised an innovative design solution—a dynamic texture of protruding glass cubes of different depths.

"The protruding glass cube represents the element that characterizes the façade—the view is 180 degree open and enhances the feeling of being suspended in the air, reducing the perception of the boundary line between inside and outside," explain designers Luca Papiani and Giuseppina Motta. This use of materials resulted in an interplay of full and empty spaces, transparency and opacity.

The building is equipped with a garden and outdoor pool, an exclusive spa and gym, while the hall was designed with moveable panels to accommodate art events. A private villa on the top floor features a glass pool that projects 3-meters into empty space similarly to the balcony cubes—a big structural challenge for the architects. "We had to keep the same details as in all the other bow windows but we had 40 tons of water in that specific area of the building," says Papiani and Motta. "We did not want to have metal structures on the corners because we would have lost the cleanliness of the details."

Photos by Andrea Martiradonna.



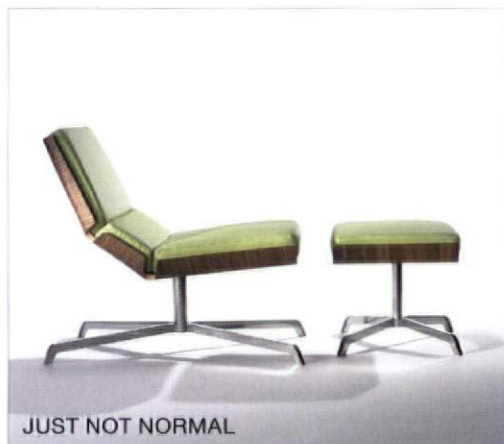
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IAC

West Hollywood, CA

Designer: Rios Clementi Hale Studios

Website: www.rchstudios.com

A dramatic, steel structure will drape the front of the West Hollywood offices of IAC creating a sculptural lattice of native plantings. The client challenged the designers to re-imagine the building's exterior keeping in mind several goals—announcing the building's entry and creating an inviting urban plaza.

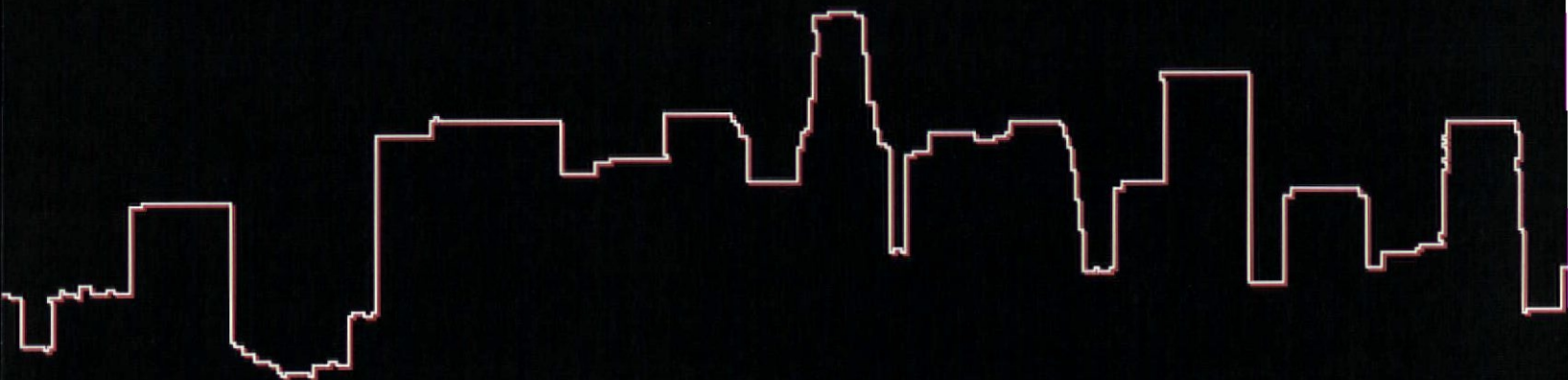
The winning concept was an environmentally friendly, green screen that seems to peel away from the building serving as a canopy over the main entrance and dining areas. "We wanted to create something iconic—an urban-scaled sculpture—that would transform the prominent intersection," says senior associate Sebastian Salvadó. The screen gently echos the existing façade though this did not drive the original design. "The pattern primarily was the result of addressing two practical concerns—anchoring directly into the strongest parts of the existing concrete frame and preserving the views from the windows," he says. "The result is the open 8' X 8' grid. The similarities between the two patterns contribute to the screen appearing as if it is being peeled away from the building."

The planting of the structure was inspired by natural landscapes of the Southern California hills, while irrigation will be supplied from an existing water source under the site. The biggest challenge was dealing with drainage. "The green screen has a sheet metal finish on the back side, which conceals an integrated gutter system that channels water down the bottom of the screen and keeps [it] from dripping down on to the plaza below," adds Salvadó.

Renderings courtesy of Rios Clementi Hale Studios.



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15 PRODUCTS THAT WILL SAVE LIVES

BY LISA BINGHAM-DEWART

Unpredictability might be the only thing in life that's truly predictable. For every advance we've made to say when and where the next hurricane or tornado might hit, it's still impossible to say when, where or how strong the next earthquake will be. Nor can we predict the extent of damage, though we try our best to mitigate it. That's where good design comes in, taking some of the variables out of the equation, be it because of natural or manmade disasters or the machinations of organisms invisible to the naked eye. The solutions can be the elegantly low tech—as simple as a cistern for water or a composting toilet when plumbing and sewage fail. They can also be downright futuristic, featuring materials and methods unknown even a few decades ago. New technologies can even be combined in new and surprising ways with materials as old as the earth itself. We polled experts to find the latest products and materials that can help save lives...and your kitchen floor.



1 Debris Flow Barriers

MACCAFERRI

Long after wildfires are extinguished risks remain, especially when the rainy season hits and the chances of **flooding** and **landslides** skyrocket. Maccaferri's debris flow barriers combine ease of installation and minimal maintenance with state-of-the-art deformation brakes to absorb dynamic and static loads, and can remain in place until vegetation regrows.

2 Trio-E Energy Efficient Steel-Stiffened Door

CECO DOOR

With the Trio-E Energy Efficient Steel-Stiffened Door, strength and energy efficiency are effectively combined in one package. The new door meets Florida's most stringent code requirements for **hurricane force winds** and flying debris, while also increasing thermal efficiency and reducing energy loss. It also happens to be the first swinging door certified to the new UL Environment UL ISR 102 standard.

3 Strong Frame Special Moment Frame

SIMPSON STRONG TIE

With its yield-link technology designed to bear the brunt of lateral forces during a **seismic event**, any damage sustained to the Frame Special Moment Frame is isolated within the frame to only its replaceable links—the structural integrity of the beams and columns remains. As an added benefit, the frame makes an ideal choice for retrofits, since it doesn't require field welding.

4 Ornilux

ARNOLD GLASS

From loss of habitat to domestic animals, threats to birds are myriad. It's estimated that in North America tens of millions alone are killed by **collisions with glass**, and to address it, Arnold Glass has developed Ornilux, which features a patterned, UV reflective coating visible to birds but nearly transparent to humans.

5 Reynobond® with Kevlar®

ALCOA

Hurricane force winds bring with them massive amounts of flying debris, in turn causing untold amounts of damage. Reynobond with Kevlar offers a lightweight, flexible panel system that brings with it impact-resistant strength, created by a thin layer of Kevlar fabric—five times stronger than steel—applied to Reynobond's polyethylene core.

6 E-Boards

ENVIRO BOARD CORPORATION

Taking agricultural waste (wheat and rice straw for example), Enviro Board transforms it into durable, concrete-like panels that take the place of drywall, thermal insulation and exterior plywood. Besides being a sustainable material, the boards are **earthquake** and **hurricane** stable and can be assembled quickly and efficiently to provide shelter during disasters.

7 Silver Knight Never Wax Sheet Flooring

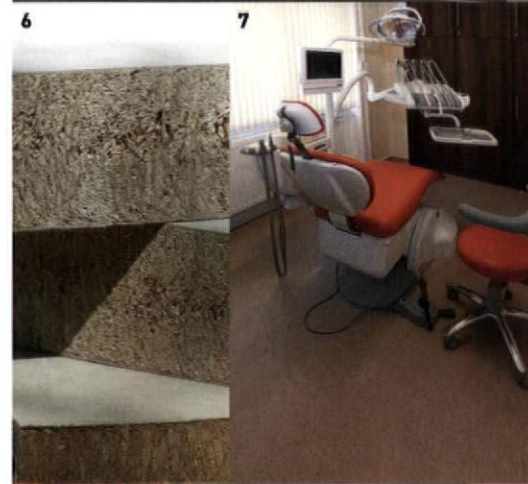
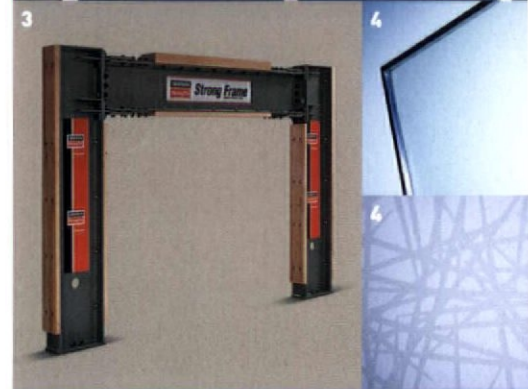
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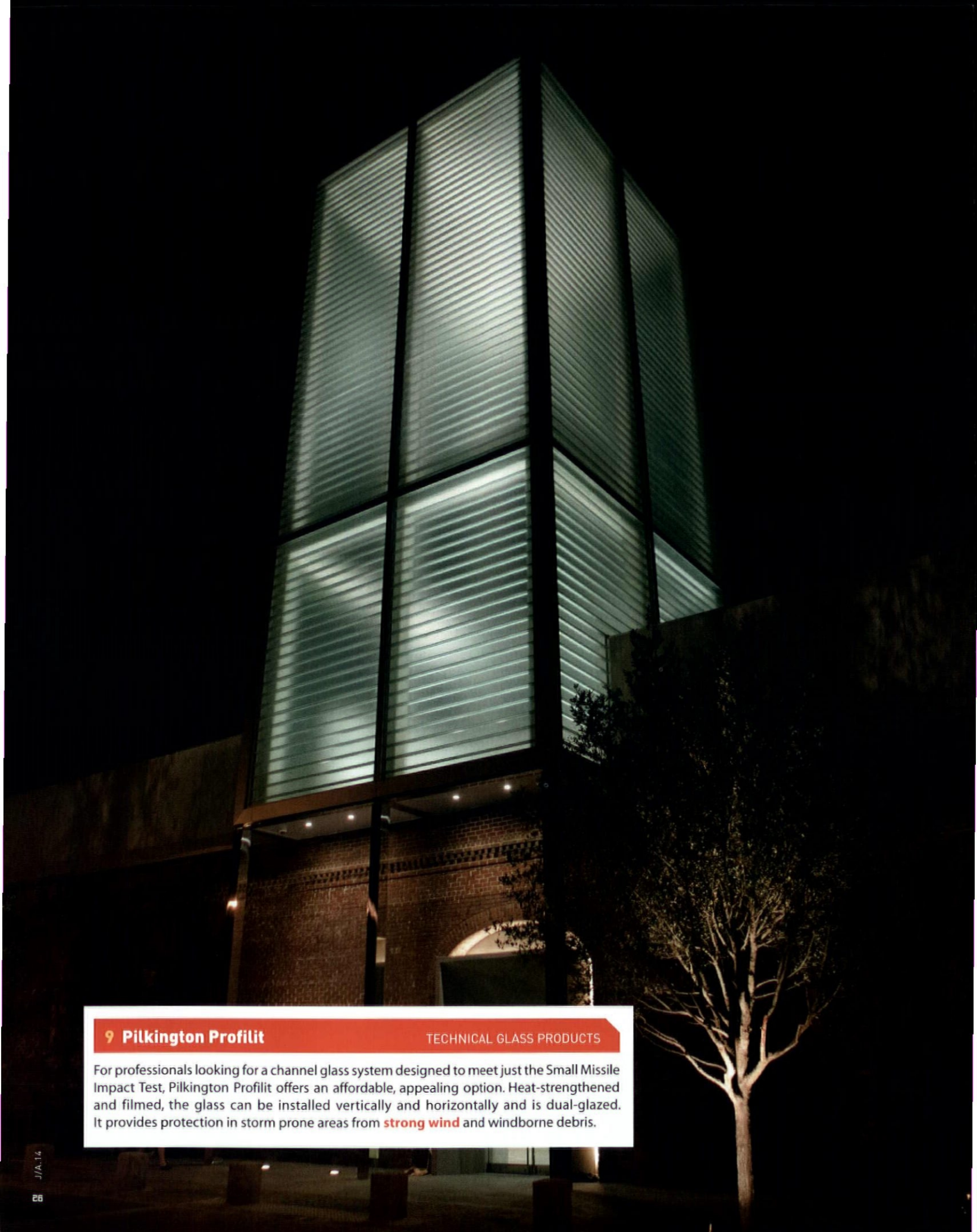
With **infection** a persistent worry in healthcare settings, a self-disinfecting floor covering is a key part of the control strategy. Silver Knight Never Wax Sheet Flooring provides two lines of defense, all without chemicals, and has been incorporated into projects designed by Cuninghame Group. Instead the surface incorporates nano-silver to destroy or inactivate pathogens and nano-TiO₂, a photo-catalyst, to destroy VOCs and odor.

8 Eos Surfaces

CUPRON

As bacterial resistance continues to rise, new ways of controlling the spread of **infection** become paramount. Eos Solid Surfaces enhanced with Cupron, have the bacteria-killing properties of copper built-in so it won't wear out or degrade over time, resulting in a material that continuously eradicates 99.9 percent of bacteria in two hours.





9 Pilkington Profilit

TECHNICAL GLASS PRODUCTS

For professionals looking for a channel glass system designed to meet just the Small Missile Impact Test, Pilkington Profilit offers an affordable, appealing option. Heat-strengthened and filmed, the glass can be installed vertically and horizontally and is dual-glazed. It provides protection in storm prone areas from **strong wind** and windborne debris.

10 Nea Cera

AVENERE CLADDING

Building design resiliency into structures takes countless forms, among them adding rain-screens to keep things dry in wet conditions preventing **rot, rust and mold** from developing. Nea Cera's terra-cotta panels provide a durable, lightweight option that added to it their seismic credentials—the system achieved the highest possible rating for seismic drift—raises their usefulness to another level.

11 Engineering Simulation Software

ANSYS

Life saving begins at the moment a project does. Fortunately, simulation software, such as ANSYS's, provides tools to analyze a host of elements, from rock and soil mechanical analysis to material-specific maximum load assumptions and beyond, meaning a project will not only be cost-effective and innovative, but as strong and safe as possible.

12 Concrete Impregnated Fabric Shelter

CONCRETE CANVAS LTD.

Air and water are all that are needed to build a durable, **water-proof, fire resistant** Concrete Canvas structure that, in one version, can be constructed by two people in just one hour and ready to use in 24. The secret is a cement-based composite fabric that is both strong and lightweight.

13 Master Flow Green Machine Roof Vent

GAF

When the power goes out and stays out longer than a back-up generator can provide power, buildings, especially glass ones, can turn into ovens with temperatures topping 150 degrees. For John D. Lesak, of Page & Turnbull, solar powered roof vents, including small-scale models by GAF, are key to cooling structures during big **blackouts**.

14 Tyfo Fibrwrap

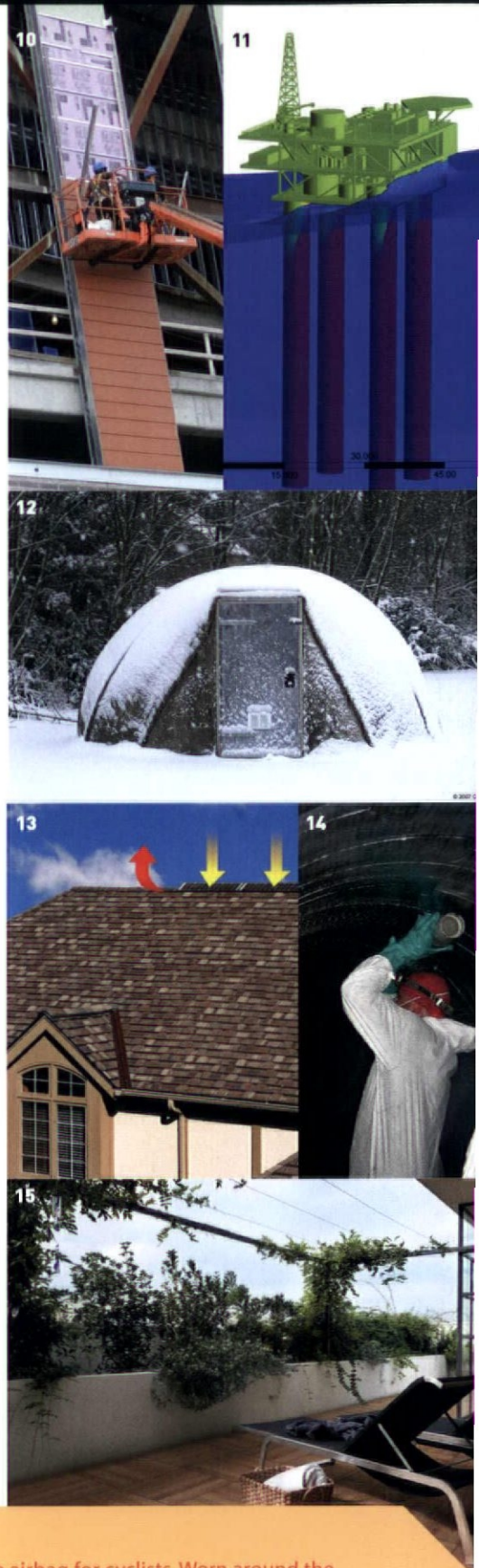
FYFE CO.

First used as utility infrastructure on columns, bridges and sewage piping, fiber-reinforced plastic has gained popularity as a strengthener for brick and masonry walls—not to mention made big technological strides over the past decade. Fibrwrap's systems, featuring TYFO carbon, glass, aramid and hybrid fabrics are on the cutting-edge of the movement notes Don Tiefenbrunn, of BCCI Construction.

15 Rooftop Pavers

CERAMICHE KEOPE

Once you think of it, it seems so simple: In **windy conditions**, loose gravel on rooftops turns into small, potentially deadly missiles. Instead of using the material for high-rise structures, securely installed roof top pavers such as those from Ceramiche Keope, keep roofing material where it belongs—not in the air. ■



PROCEED WITH CAUTION

At the same time new technologies have been developed to save dozens—if not

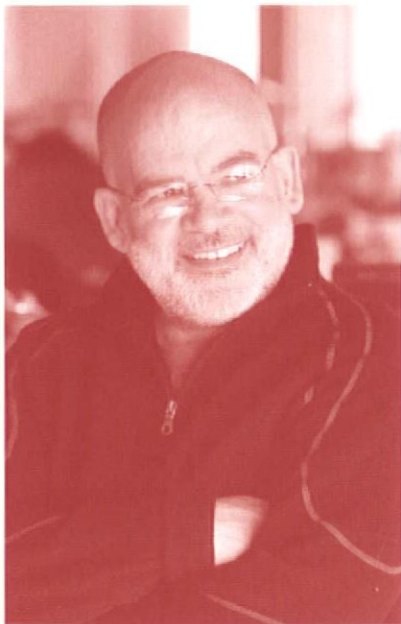
hundreds or even thousands of lives when the unexpected strikes—there are plenty of new designs that focus on personal safety. Take **Shockbox**, a line of helmet sensors created to count the number of hits and indicate when one could result in a concussion. Or **Hövding**,

the airbag for cyclists. Worn around the neck like a scarf, it inflates on impact and does away with the need for a traditional, bulky bike helmet. In trauma-related advances, **Celox** offers an innovative, hemostatic gauze that stops bleeding fast and has been tested on the battlefield.



LEARNING FROM KATRINA

By Michael Webb



*An interview with Steve Dumez, FAIA,
partner at Eskew+Dumez+Ripple*

Nine years ago, Katrina devastated New Orleans and a huge surrounding area, causing more than 1800 deaths and an estimated \$81 billion in damage. The levees, built up over the previous century, failed catastrophically, and 80 percent of the city was flooded. Though the storm was one of the strongest of 2005, the disaster was greatly magnified by human ineptitude: substandard construction by the Army Corps of Engineers, a lack of political leadership at every level, decisions that aggravated the flooding, and a breakdown in relief efforts. Since that time, Hurricane Sandy clobbered New York, and our failure to combat or plan for climate change, suggests a growing tide of natural disasters.

The Dutch have lived and prospered below sea level for much of their history, building defenses that have paid for themselves many times over. There, the realities are clearly understood and there's a national consensus on doing whatever is required to keep the waters at bay, or move to higher ground. So how can we learn from these past lessons to improve infrastructure and protect families in the US?

To learn more of New Orleans' response, we talked to Steve Dumez, a partner in the leading local firm of Eskew+Dumez+Ripple. He is a native of the city and has contributed to its recovery, as an architect, planner, and community leader.

Has enough been done to protect New Orleans from another natural disaster?

The additional infrastructure that has been built by the Corps and the changes that have been made to remedy the failure of the levees should prevent the devastation that Katrina inflicted. The city has rebuilt three major hospitals that should remain operational for a week after a storm that knocks out water and power. On a mundane level, we can absorb heavy rain at almost no cost by retaining it on site to reduce street flooding.

It's important to have a historical perspective. The Mississippi developed natural levees, though there were always seasonal floods. The city was settled on high ground, and it accommodated a certain degree of disruption. Houses were raised off the ground. But the invention of the screw pump allowed swampy areas to be drained, flood walls were constructed, and people settled in areas that were historically at risk. The levees protect from seasonal

flooding but they choked off the wetlands that naturally absorbed high water—an unintended consequence. Marshes were our first line of defense against storms—a shock absorber—so now we are seeing higher levels of surge.

Should the Lower Ninth Ward, which was virtually erased, be rebuilt?

In fact, that area is not below sea level. The destruction was the result of a funneling effect that allowed a storm surge to sweep in to the center of city. The flooding was unnaturally created.

Unfortunately the old system was designed in such a way that actually put us at risk. A failure of imagination—in this case, to envision the worst case scenario—resulted in a drainage system that was overrun and awkwardly located in the middle of the city which, when the system was implemented, represented the fringes of the city limits giving way to swampland and marshes. Over time, the land north of the pumps, some of the lowest in the entire city was developed. Had the pumps on the main canals been extended and located north of the current city limits and closer to the edges of Lake Ponchartrain, the flooding of the city and the build-up of water resulting in the failure of our levees could have been prevented or, at the very least marginalized.

The footprint of the city has expanded beyond where it was in 1960, even though that was the year that the population peaked at 600,000, dropping to 450,000 in the next four decades. So the sensible thing after Katrina would have been to redevelop the safest areas of the city first, and defer the others. But local politics prevented that.



ABOVE: Tasked with building safe and affordable housing, Make it Right allowed architects (like Eskew+Dumez+Ripple's design above) to explore different building solutions.

How would you assess the value of Make It Right? [the ongoing project, sponsored by actor Brad Pitt, to make the Lower Ninth a model of innovation, with houses designed by top architects for former residents of this poor African-American community]

As a demonstration of resilience and sustainability it was huge. The first MIR houses were heavily subsidized because construction techniques and technology were not sufficiently advanced. The program has trained contractors, educated the public, and developed strategies for reducing costs. It's producing more affordable homes with dramatically reduced utility bills—as low as \$20 a month. We designed a prototype and six of them have been built. Initially, the houses had to be raised eight feet above the ground; now it's three feet, based on FEMA flood data. But nature has a way of overwhelming our best plans; we cannot control it. We always design for the last disaster without imagining what the future may bring.

How can we change this notion?

The emerging trend in design is what we call "resilient design" and it is a direct response to climate change and its impact on our planet and the places we live. When 100 year floods are happening every five years, we are obligated, as architects and designers, to consider the new reality and design in ways that best prepare and respond to worst-case scenarios. More than the choice of materials or the location of building systems, resilience is about "coming back," and facilitating that renaissance by providing the basic design services that are the seminal components of any community resurgence: a school, hospital, library, community center, economic opportunity, etc. Our role in this in transition is integral. Technology will continue to play an integral part in this evolving trend. Not only does it help us create smarter buildings—operationally speaking—but it will continue to play an integral role in our daily lives. Understanding how software works, how it's utilized in the industry, and how it can



Bottom photo by James Ewing. Both photos courtesy of the Make It Right Foundation

ABOVE, TOP: Trahan Architects designed a contemporary vision of a shotgun house. BOTTOM: Brooks + Scarpa's vision used recycled wooden pallets in a patchwork design to keep costs down.

best influence design and operations will help us create better buildings and better, smarter communities.

Should architects be developing new models that draw on the vernacular and better adapt to floods and storms?

We build in a place that has an incredibly rich architectural history—much of which has been preserved. Older houses were designed for a hot humid climate, but a lot has changed—in construction and expectations. It's inappropriate to replicate historic structures; we have to address risks in a new way, make our designs smarter and more resilient. Sandy was a wake-up call, even more than Katrina. We are all living in areas of risk and need to be thinking about them.

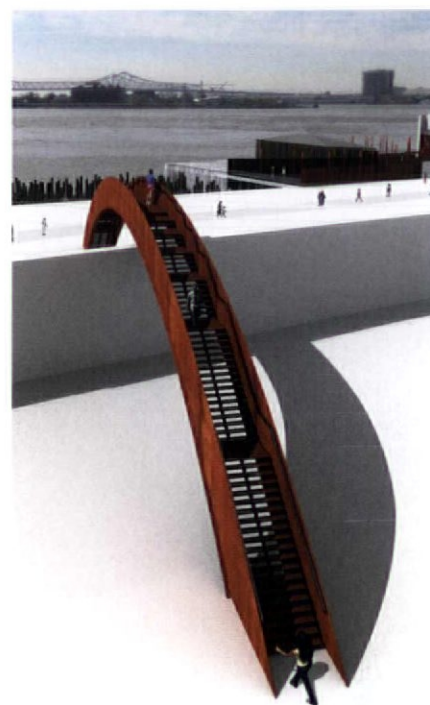
Describe the 6.5-mile riverfront master plan the city commissioned from EDR?

The river's edge has always been the starting point for development. It used to be purely industrial, and closed to residents. That began to change in the '70s and in 1984 the World's Fair was held on the riverbank and provided access that had never existed before. Residents realized for first time what a spectacle a working river is. The master plan grew out of a desire to develop the waterfront in an intelligent way and link it with other parts of the city.

Developed after Hurricane Katrina, the master plan proposes a key role for a six-mile stretch along the East Bank of the Mississippi River. From Jackson Avenue to the former Holy Cross school site at the mouth of the Industrial Canal, this plan envisions an urban, active, inhabited, beautiful river crescent for the Crescent City's present and future citizens to enjoy. The plan has been estimated to stimulate \$3.2 billion dollars in total investment and generate 24,000 permanent jobs in New Orleans by 2024. Each of these sites are connected via a ring of new and existing green spaces on the riverfront. The first phase of the plan, Crescent Park, reclaimed a river-edge and brownfield site just down river from the historic French Quarter. From it emerged a 1.6-mile linear park connecting the historic Bywater and Marigny neighborhoods back to the riverfront and providing pedestrian access to the French Quarter and the Riverfront trail.

One of the biggest challenges was designing without compromising the integrity of the floodwall. For obvious reasons it had to stay, but it was one of the largest hurdles that separated residents from the river followed by the rows of train tracks that immediately followed. Regulations stipulated we couldn't go through it, and going under it made no sense in a city below sea level. The only choice was to go over it. Working with David Adjaye we helped design and implement a simple bridge that spanned the tracks and the wall providing residents with unrestricted access to the park. The additional perk: It created spectacular views of the neighborhood and the city skyline in the distance.

The future of the plan is uncertain. Regrettably, it was born under the Nagin administration and its future funding is dependent on public approval and monies in addition to a new mayor and his own agenda for the city. ■



ABOVE, TOP: A bridge traverses the flood wall to connect residents with green spaces. BOTTOM: Undaunted by Katrina's wrath, Eskew+Dumez+Ripple proposed a riverfront development plan that would inspire optimism in the shattered community.

CREDITS

10 Hanover Street

LONDON, UK

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ARCHITECT: Squire and Partners

M&E: MTT

STRUCTURE: Waterman

QUANTITY SURVEYOR: WT Partnership

CONTRACTOR: MACE

EXTERNAL SHUTTER MANUFACTURER: Astec Projects

Bénéteau Headquarters

GIVRAND, FRANCE

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FABRICATION: LCCA

MATERIAL: HI-MACS® Alpine White

INSTALLATION: MCS

PHOTOGRAPHER: Mathieu Ducros

IAC

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Senior Associate Sebastian Salvadó; Associate Naseema Asif;

Designer Asaf Dali, LEED AP BD+C; Landscape Designer Brent Jacobsen, ASLA, RLA, LEED Green Associate

CONTRACTOR: Swinerton Builders

HORTICULTURE/GREEN WALL CONSULTANT: Rana Creek

STRUCTURAL ENGINEER: Inertia Engineers

MEP CONSULTANT: Stantec

CIVIL ENGINEER: Incledon Consulting Group

LIGHTING CONSULTANT: E Squared Lighting

Janus House

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STRUCTURAL ENGINEERING: Strandberg Engineering

GENERAL CONTRACTOR: Benny McGrath, Fine Art Construction

Lomocube

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CONSULTANT: Diletta SA

PHOTO CREDIT: Andrea Martiradonna

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Courtesy of Summit Furniture.

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Wednesday, August 13, 2014

Michael Webb on Books: Artists' Adventure

The Journey to Tunisia, 1914: Paul Klee, August Macke, Louis Moilliet, Hatje Cantz, € 29.80.

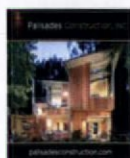
A companion book to an exhibition presented at the Zentrum Paul Klee in Bern to mark the centenary of a legendary journey. In April 2014, three artists whose friendship spanned national boundaries on the peaceful eve of the First World War, made a productive two-week trip to Tunisia. That brief immersion in an exotic culture, and the brilliance of the light and colors, transformed their art. Macke had only a few months to live; he was cut down in one of the early battles. The other two lived on, Klee until 1940, Moilliet until 1962, creating work that recalled their shared experience in North Africa.

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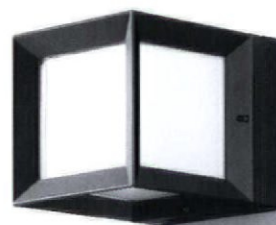
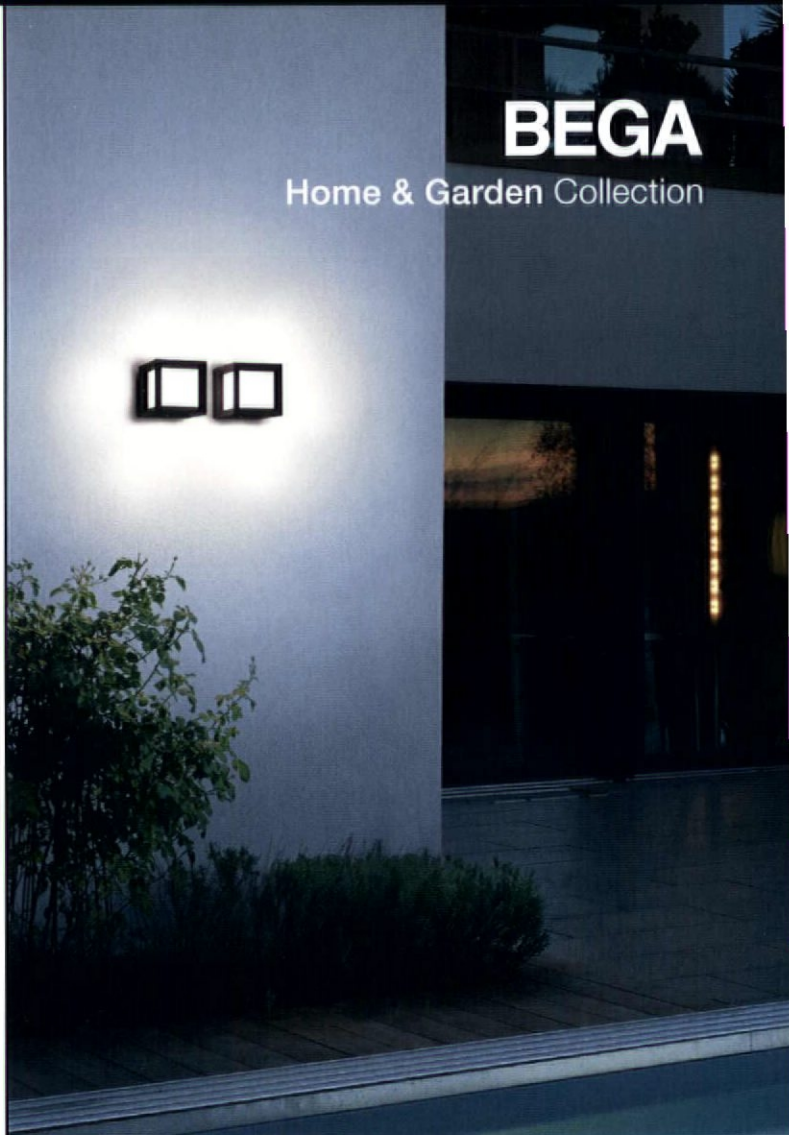
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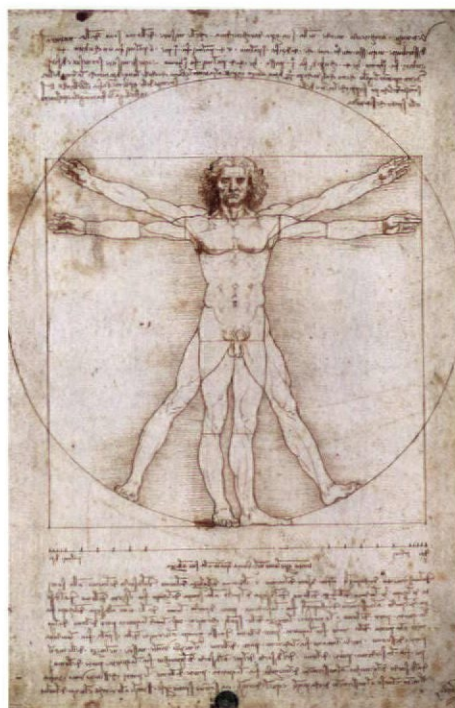
BY ANDREA COHEN GEHRING, FAIA, LEED AP

"COMMODITY, FIRMNESS, AND DELIGHT," VITRUVIUS' treatise on architecture as a guide for building projects, refers to a balanced ensemble of elements including appropriate spatial accommodations, structural stability, and attractive appearance. In this issue, we explore one of the most fundamental elements of architecture, the idea of "Firmness" in a building, which refers to its properties of structure and life safety for its inhabitants. Today's design solutions require innovation to strike a balance between the three elements of Vitruvius's 1st Century BC philosophy from *The Ten Books on Architecture*, which is still surprisingly relevant even in today's practices.

Resistivity to earthquakes, floods, hurricanes, tornados, and terrorism are some of the most important programmatic considerations for a building's design. Although they can result in varying impacts to the built environment, these events all have the power to cause physical harm, emotional angst, and apprehension to the inhabitants of our buildings. Projects are often challenged to strike the right balance between

Vitruvius' elements due to difficult sites, tight budgets, and programmatic forces that are sometimes in direct conflict with one another. Design has the power to make buildings safer by utilizing materials and technology to resist the impacts of natural and manmade forces. Design can also provide creative solutions to tight urban sites, and the best projects can stretch budgets to meet and exceed client expectations. And, of course, design has the power to "Delight".

Often it's a race against time, especially when dealing with renovations of older buildings which, if they contain historic resources, adds yet another layer of complication. Architects are in the forefront of designing a new, safer generation of buildings for the environment and more secure spaces from threats. We are and always will be a profession of dreamers, extreme optimists, and problem solvers and we will continue to innovate and elevate the human spirit through design. Vitruvius would be proud of this generation of architects.



Andrea Cohen Gehring is a Design Leader at DLR Group and this year's AIA/LA Chapter President.

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